

In the Claims

1-34. (canceled)

35. (currently amended) An isolated polypeptide consisting of:

- a) amino acids 94-124 (~~SEQ ID NO: 6~~) of human OX40 ligand (OX40L);
- b) amino acids 94-124(~~SEQ ID NO: 6~~) of human OX40L, wherein one or more amino acids have been deleted, said polypeptide contains amino acids 107-111 of human OX40L and said polypeptide binds to the OX40 receptor (OX40R);
- c) ~~a peptide sequence of human OX40L of between 5 and 10 contiguous amino acids of OX40L~~, wherein said polypeptide contains amino acids 107-111 of OX40L and binds to OX40R ~~that binds to OX40R~~;
- d) amino acids 107-116 (~~SEQ NO ID: 8~~) or 107-111 (~~SEQ ID NO: 13~~) of human OX40L;
- e) an active mutant of a), b), c) or d), wherein one or more of the amino acids has been conservatively substituted and said active mutant binds to OX40R;
- f) a fusion polypeptide or peptide comprising a protein sequence other than human OX40L (~~SEQ ID NO: 1~~) fused to:
  - i) a peptide consisting of amino acids 94-124(~~SEQ ID NO: 6~~) of human OX40L;
  - ii) a peptide consisting of amino acids 94-124 (~~SEQ ID NO: 6~~) of OX40L, wherein one or more amino acids have been deleted, said peptide contains amino acids 107-111 and said fusion polypeptide binds OX40R;
  - iii) ~~a peptide sequence of human OX40L~~ an amino acid sequence of between 5 and 10 contiguous amino acids of OX40L that includes

amino acids 107-111 of OX40L and said fusion polypeptide that  
binds to OX40R;

- iv) a peptide consisting of amino acids 107-116 (~~SEQ ID NO: 8~~) or 107-111 (~~SEQ ID NO: 13~~) of human OX40L; or
- g) a derivative of a), b), c), d), e) or f).

36. (previously presented) The isolated polypeptide according to claim 35, wherein said fusion polypeptide or peptide comprises the amino acid sequence belonging to one or more of the following protein sequences: membrane-bound proteins, extracellular domains of membrane-bound protein, immunoglobulin constant region, multimerization domains, extracellular proteins, signal peptide-containing proteins, export signal-containing proteins.

37. (previously presented) The isolated polypeptide according to claim 35, further comprising a molecule selected from the group consisting of radioactive labels, biotin, fluorescent labels, cytotoxic agents, and drug delivery agents.

38. (canceled)

39. (currently amended) An isolated peptide, peptide mimetic, or a non-peptide mimetic ~~designed on the sequence, the structure or the sequence and structure of an amino acid sequence~~ corresponding to of amino acids 107-116 (SEQ ID NO: 8) or 107-111 (SEQ ID NO: 13) of human OX40L.

40-56. (canceled)

57. (new) The isolated polypeptide according to claim 35, wherein said polypeptide consists of amino acids 94-124 of human OX40L.

58. (new) The isolated polypeptide according to claim 35, wherein said polypeptide consists of amino acids 94-124 of human OX40L, wherein one or more amino acids have been deleted, said polypeptide contains amino acids 107-111 of human OX40L and said polypeptide binds to the OX40 receptor (OX40R).

59. (new) The isolated polypeptide according to claim 35, wherein said polypeptide consists of between 5 and 10 contiguous amino acids of OX40L, contains amino acids 107-111 of OX40L and binds to OX40R.

60. (new) The isolated polypeptide according to claim 35, wherein said polypeptide consists of amino acids 107-116 of human OX40L.

61. (new) The isolated polypeptide according to claim 35, wherein said polypeptide consists of amino acids 107-111 of human OX40L.

62. (new) The isolated polypeptide according to claim 35, wherein said polypeptide consists of an active mutant of a), b), c) or d), wherein three or fewer amino acids are conservatively substituted and said active mutant binds to OX40R.

63. (new) The isolated polypeptide according to claim 35, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of human OX40L.

64. (new) The isolated polypeptide according to claim 35, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of OX40L, wherein one or more amino acids have been deleted, said peptide contains amino acids 107-111 and said fusion polypeptide binds OX40R.

65. (new) The isolated polypeptide according to claim 35, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to an amino acid sequence of between 5 and 10 contiguous amino acids of OX40L that includes amino acids 107-111 of OX40L and said fusion polypeptide binds to OX40R.

66. (new) The isolated polypeptide according to claim 35, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 107-116 of OX40L.

67. (new) The isolated polypeptide according to claim 35, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 107-111 of human OX40L.

68. (new) The isolated polypeptide according to claim 35, wherein said polypeptide is a derivative of a), b), c), d), e) or f).

69. (new) A composition comprising a pharmaceutically acceptable carrier, excipient, stabilizer, diluent, or combination thereof and a polypeptide consisting of:

- a) amino acids 94-124 of human OX40 ligand (OX40L);
- b) amino acids 94-124 of human OX40L, wherein one or more amino acids have been deleted, said polypeptide contains amino acids 107-111 of human OX40L and said polypeptide binds to the OX40 receptor (OX40R);
- c) between 5 and 10 contiguous amino acids of OX40L, wherein said polypeptide contains amino acids 107-111 of OX40L and binds to OX40R;
- d) amino acids 107-116 or 107-111 of human OX40L;
- e) an active mutant of a), b), c) or d), wherein one or more of the amino acids has been conservatively substituted and said active mutant binds to OX40R;
- f) a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to:

- i) a peptide consisting of amino acids 94-124 of human OX40L;
- ii) a peptide consisting of amino acids 94-124 of OX40L, wherein one or more amino acids have been deleted, said peptide contains amino acids 107-111 and said fusion polypeptide binds OX40R;
- iii) an amino acid sequence of between 5 and 10 contiguous amino acids of OX40L that includes amino acids 107-111 of OX40L and said fusion polypeptide binds to OX40R;
- iv) a peptide consisting of amino acids 107-116 or 107-111 of human OX40L; or
- g) a derivative of a), b), c), d), e) or f).

70. (new) The composition according to claim 68, wherein said polypeptide consists of amino acids 94-124 of human OX40L.

71. (new) The composition according to claim 68, wherein said polypeptide consists of amino acids 94-124 of human OX40L, wherein one or more amino acids have been deleted, said polypeptide contains amino acids 107-111 of human OX40L and said polypeptide binds to the OX40 receptor (OX40R).

72. (new) The composition according to claim 68, wherein said polypeptide consists of between 5 and 10 contiguous amino acids of OX40L, contains amino acids 107-111 of OX40L and binds to OX40R.

73. (new) The composition according to claim 68, wherein said polypeptide consists of amino acids 107-116 of human OX40L.

74. (new) The composition according to claim 68, wherein said polypeptide consists of amino acids 107-111 of human OX40L.

75. (new) The composition according to claim 68, wherein said polypeptide consists of an active mutant of a), b), c) or d), wherein three or fewer amino acids are conservatively substituted and said active mutant binds to OX40R.

76. (new) The composition according to claim 68, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of human OX40L.

77. (new) The composition according to claim 68, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of OX40L, wherein one or more amino acids have been deleted, said peptide contains amino acids 107-111 and said fusion polypeptide binds OX40R.

78. (new) The composition according to claim 68, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to an amino acid sequence of between 5 and 10 contiguous amino acids of OX40L that includes amino acids 107-111 of OX40L and said fusion polypeptide binds to OX40R.

79. (new) The composition according to claim 68, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 107-116 of OX40L.

80. (new) The composition according to claim 68, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 107-111 of human OX40L.

81. (new) The composition according to claim 68, wherein said polypeptide is a derivative of a), b), c), d), e) or f).

82. (new) A composition of matter comprising a solid support and a polypeptide consisting of:

- a) amino acids 94-124 of human OX40 ligand (OX40L);
- b) amino acids 94-124 of human OX40L, wherein one or more amino acids have been deleted, said polypeptide contains amino acids 107-111 of human OX40L and said polypeptide binds to the OX40 receptor (OX40R);
- c) between 5 and 10 contiguous amino acids of OX40L, wherein said polypeptide contains amino acids 107-111 of OX40L and binds to OX40R;
- d) amino acids 107-116 or 107-111 of human OX40L;
- e) an active mutant of a), b), c) or d), wherein one or more of the amino acids has been conservatively substituted and said active mutant binds to OX40R;
- f) a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to:
  - i) a peptide consisting of amino acids 94-124 of human OX40L;
  - ii) a peptide consisting of amino acids 94-124 of OX40L, wherein one or more amino acids have been deleted, said peptide contains amino acids 107-111 and said fusion polypeptide binds OX40R;
  - iii) an amino acid sequence of between 5 and 10 contiguous amino acids of OX40L that includes amino acids 107-111 of OX40L and said fusion polypeptide binds to OX40R;
  - iv) a peptide consisting of amino acids 107-116 or 107-111 of human OX40L; or
- g) a derivative of a), b), c), d), e) or f).

83. (new) The composition of matter according to claim 82, wherein said polypeptide consists of amino acids 94-124 of human OX40L.

84. (new) The composition of matter according to claim 82, wherein said polypeptide consists of amino acids 94-124 of human OX40L, wherein one or more amino acids have been

deleted, said polypeptide contains amino acids 107-111 of human OX40L and said polypeptide binds to the OX40 receptor (OX40R).

85. (new) The composition of matter according to claim 82, wherein said polypeptide consists of between 5 and 10 contiguous amino acids of OX40L, contains amino acids 107-111 of OX40L and binds to OX40R.

86. (new) The composition of matter according to claim 82, wherein said polypeptide consists of amino acids 107-116 of human OX40L.

87. (new) The composition of matter according to claim 82, wherein said polypeptide consists of amino acids 107-111 of human OX40L.

88. (new) The composition of matter according to claim 82, wherein said polypeptide consists of an active mutant of a), b), c) or d), wherein three or fewer amino acids are conservatively substituted and said active mutant binds to OX40R.

89. (new) The composition of matter according to claim 82, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of human OX40L.

90. (new) The composition of matter according to claim 82, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 94-124 of OX40L, wherein one or more amino acids have been deleted, said peptide contains amino acids 107-111 and said fusion polypeptide binds OX40R.

91. (new) The composition of matter according to claim 82, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to an



amino acid sequence of between 5 and 10 contiguous amino acids of OX40L that includes amino acids 107-111 of OX40L and said fusion polypeptide binds to OX40R.

92. (new) The composition of matter according to claim 82, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 107-116 of OX40L.

93. (new) The composition of matter according to claim 82, wherein said polypeptide is a fusion polypeptide or peptide comprising a protein sequence other than human OX40L fused to a peptide consisting of amino acids 107-111 of human OX40L.

94. (new) The composition of matter according to claim 82, wherein said polypeptide is a derivative of a), b), c), d), e) or f).